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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,489	02/22/2002	Bernd Niethammer	01-0401	9328

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EXAMINER

SOLAK, TIMOTHY P

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 09/03/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,489

Applicant(s)

NIETHAMMER, BERND

Examiner

Timothy P. Solak

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13 is/are pending in the application.
- 4a) Of the above claim(s) 10-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 01 May 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Status

The status of the claims in the application cited above is as follows:

- ⌘ Claims 1-7 and 14-21 have been canceled.
- ⌘ Claims 9-13 are pending.
- ⌘ Claims 10-12 are withdrawn from consideration as being directed towards a non-elected species.

Drawings

The drawing corrections, received on 05/01/2003, have been approved.

The remarks section of the amendment received on 05/19/2003, has clarified and corrected the objections to the drawings with respect to the "multitude of volumes".

Accordingly, all objections to the drawings made in the Office Action, mailed on 03/25/2003, are hereby withdrawn. Applicant is still required to submit formal drawings at the time of allowance, correcting the lettering and margin issues and incorporating the approved drawing changes. The requirement for corrected drawings will not be held in abeyance.

Specification

The new Abstract of the Disclosure, received on 05/19/2003, has overcome the objections set forth in the Office Action mailed on 03/25/2003. Accordingly all objections to the abstract are hereby withdrawn.

The new title has been approved by the Examiner and made of record. Accordingly all objections to the title are hereby withdrawn.

The amendments to the specification, received on 05/19/2003, have overcome the objections set forth in the Office Action, mailed on 03/25/2003. Accordingly, all objections to the specification are hereby withdrawn.

Claim Rejections - 35 USC § 112

Cancellation of Claims 14-21 (see Response to Restriction Requirement, received on 07/31/2003) renders the rejections under 35 USC § 112 set forth in the Office Action, mailed 03/19/2003 (Claims 14-17 and 19-20), moot.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. (3,639,081). Gray et al. teach a multiple stage pump, comprising at least two pumps 12/13

equipped with at least two valve means 16/23 and 17/24 for regulating fluid from the at least two pumps. Gray et al. further teach the at least two valve means are upstream from the at least two pumps and in respectively the same line as the at least two pumps (see Figure 1). Further Gray et al. teach the multiple staged pump further comprises a merged line 15 upstream from the at least two valve means and the at least two valve means are each a set of valves (regulator valve 16 and 17 and on/off valves 23/24). Although Gray et al. teach most of the limitations of the claims, including a valve means comprising a valve set, he does not disclose all of the valve types or combinations encompassed in the disclosure. The instant invention attempts to regulate a pump's flow by positioning a valve upstream of the pump. The disclosure attempts to enumerate all known valve types and combination thereof as suitable apparatuses to accomplish the regulation function. The means plus function of Claim 8 is met by either the valve regulator 16 or the on/off valve 23. Further, it is considered well within the level of ordinary skill, in the art of pump fabrication, to have substituted any type of regulator valve or gate valve for the valves disclosed by Gray et al. to have advantageously increased the utility of the unit. Such minor modifications would not have affected the unit's function and would require only a basic level of skill. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used any known type of valve or combination thereof, in the pump disclosed by Gray et al., to have advantageously increased the unit's utility.

Restriction Requirements

In response to applicant's argument, namely that all the species of Group II (claims 8-13) should be considered together because "a thorough search of the subject matter of any one group

would encompass a search of the subject matter of the remaining claims" has been considered but is not persuasive.

Subject matter, within the U.S. Patent Classification System, is organized based on what function the item performs and not on what the item is. As pointed out in the Notice of Restriction, mailed 07/03/2003, different subclasses need to be searched for different combinations; for example, for a species of pressure relief valves, subclass 417/299 needs to be considered; while for a species of pressure relieve valves subclass 417/307 needs to be looked at. In this instance, for each additional species, at least two or more subclasses would have to be scrutinized beyond those required for elected species. The time constraint of examination prohibits the number of classes and subclasses that the Examiner can search. Therefore the restriction requiring an election of species is proper.

In response to applicant's argument that an election of species would place "a heavy burden on Applicants that would outweigh any perceived burden on the Examiner", applicants are reminded that the examination burden is not limited exclusively to a prior art search but also includes the effort required to apply the art by making and discussing all appropriated grounds of rejection. Therefore the restriction requiring an election of species is proper.

Response to Arguments

Applicant's arguments filed 05/19/2003 have been fully considered.

Applicant's arguments with respect to Claims 1-7 and 14-21 have been considered but are moot in view of cancellation of Claims 1-7 and 14-21.

Applicant's arguments with respect to Claims 8-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Rishel (4,945,491) teaches a multiple stage pump, comprising at least two pumps 20/30, at least two valve means 26/24 and 36/34 for regulating fluid from the at least two pumps and a common merged line (see Figure 1) upstream from the at least two valve means.
- Parquet (4,164,119) teaches a multiple stage pump, comprising at least two pumps 12/13, at least two valve means 21/28 for regulating fluid from the at least two pumps and a common merged line 17 upstream from the at least two valve means.
- Krebs (5,226,289) teaches a multiple stage pump, comprising at least two pumps 1/2, at least two valve means 33/34 for regulating fluid from the at least two pumps and a common merged line 7 upstream from the at least two valve means.
- Day (4,953,458) teaches a multiple stage pump, comprising at least two pumps 23/24, at least two valve means 26/28 and 37/29 for regulating fluid from the at least two pumps and a common merged line (see Figure 4) upstream from the at least two valve means.
- Yamaguchi et al. (JP 63-205496) teach a multiple stage pump, comprising at least two pumps P1/P2, at least two valve means Va/Vb for regulating fluid from the at


least two pumps and a common merged line 5 upstream from the at least two valve means.


- Akaha (JP 62-7990) teaches a multiple stage pump, comprising at least two pumps 1/2/3, at least two valve means 4/5/6 for regulating fluid from the at least two pumps and a common merged line 8 upstream from the at least two valve means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P. Solak whose telephone number is 703-308-6197. The examiner can normally be reached on Monday through Friday from 10am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 703-308-2675. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.


JUSTINE R. YU
PRIMARY EXAMINER


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August 31, 2003